



Thinking Machines Corporation The Connection Machine Supercomputer

PRODUCT SPECIFICATIONS

Processors	4096	8192	16,384	32,768	65,536
Memory	128-512 MBytes	256 MBytes-1 GByte	512 MBytes-2 GBytes	1 GByte-4 GBytes	2 GBytes-8 GBytes
Performance (Processor)					
32-bit integer add	150 Mips	300 Mips	600 Mips	1200 Mips	2500 Mips
8-bit byte add	250 Mips	500 Mips	1000 Mips	2000 Mips	4000 Mips
4K x 4K Matrix Multiply					
32-bit IEEE floating point	310 MFlops (2K x 2K)	625 MFlops	1250 MFlops	2500 MFlops	5000 MFlops
64-bit IEEE floating point	--	--	625 MFlops	1250 MFlops	2500 MFlops
Dot Product					
32-bit IEEE floating point	625 MFlops	1250 MFlops	2500 MFlops	5000 MFlops	10,000 MFlops
64-bit IEEE floating point	--	--	1250 MFlops	2500 MFlops	5000 MFlops
Performance (Example Applications)					
Poisson's Equation (32-bit)	230 MFlops	475 MFlops	950 MFlops	1900 MFlops	3800 MFlops
Wave Equation (32-bit)	875 MFlops	1750 MFlops	3500 MFlops	7000 MFlops	14,000 MFlops
Languages	*Lisp, C*	*Lisp, C*	*Lisp, C*	*Lisp, C*	*Lisp, C*
	Fortran	Fortran	Fortran	Fortran	Fortran
Front End Systems	Sun 4, VAX	Sun 4, VAX	Sun 4, VAX	Sun 4, VAX	Sun 4, VAX
Input/Output Channels					
Number of Channels	2	2	4	8	8
Capacity per channel	50 MBytes/sec	50 MBytes/sec	50 MBytes/sec	50 MBytes/sec	50 MBytes/sec
Maximum Transfer Rate	50 MBytes/sec	50 MBytes/sec	100 MBytes/sec	200 MBytes/sec	400 MBytes/sec
Environmental Requirements					
Power	30 amp 1-phase	30 amp 1-phase	30 amp 3-phase	30 amp 3-phase	30 amp 3-phase
Voltage	200-240	200-240	110/208Y	110/208Y	110/208Y
Hertz	50/60	50/60	50/60	50/60	50/60
Power Dissipation	3.5 KVA	3.5 KVA	7 KVA	14 KVA	28 KVA
Size	26" x 26" x 43"	26" x 26" x 43"	56" x 56" x 62"	56" x 56" x 62"	56" x 56" x 62"
Weight	375 lbs.	375 lbs.	1200 lbs.	1800 lbs.	3000 lbs.
Operating Temperature	70°F ± 5°F	70°F ± 5°F	70°F ± 5°F	70°F ± 5°F	70°F ± 5°F
Relative Humidity	50% ± 10%	50% ± 10%	50% ± 10%	50% ± 10%	50% ± 10%

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